

Why RAIN RFID Is the Linchpin for Retail Digital Transformation

The 2023 benchmark report from Retail Systems Research tells why RFID is the foundation on which retailers must build their future – to be competitive and to survive.

There's a digital transformation underway that retailers can't ignore.

Shoppers expect to be able to order online, even from mom-and-pop stores. They expect their purchases to be shipped quickly – to their front door or for pickup in-store. If they do shop in-person, they expect fully stocked shelves, easy self-checkout, and seamless returns.

Retailers can only meet these increasing demands if they have complete, real-time visibility into their inventory and operations. If they don't adapt, they'll be left behind. In this post-pandemic world, top retailers know that to stay ahead of the competition and to simply survive, they must digitally transform.

And it all starts with RAIN RFID.

That's the big takeaway from the 2023 benchmark report from Retail Systems Research (RSR), ["The Digital Transformation of the Retail Business Model."](#) Retailers ranked RFID as the #1 technology for providing real-time insights and powering their digital transformation.

"Their most logical starting place is the most logical starting place: RFID systems to provide real-time insights," RSR's Brian Kilcourse and Steve Rowen wrote in their report. "Insight not only into the products they sell and how those products move throughout the supply chain (and when applicable, throughout the store), but also into how their operations and personnel could be used to better effect. They see RFID as the linchpin."

Real-time visibility powered by RAIN RFID

Top retailers are already enjoying the benefits of real-time visibility enabled by RAIN RFID solutions. Amazon recently [turned to RFID](#) to broaden its popular Just Walk Out experience at select stores. It's why [Walmart mandated](#) that its suppliers for many major categories must tag their products with RFID. It helped [Nike accelerate its digital transformation](#) through the COVID-19 pandemic and emerge a step ahead. It's what makes the [high-tech shopping experience at Uniqlo](#) such a magnet for customers.



When retailers incorporate RAIN RFID into their operations, they're able to see in real time where their tagged products are in their supply chain, how many of a certain item they have, even what colors and sizes are in stock. This real-time visibility enables retailers to:

- offer [omichannel fulfillment](#) options to customers
- count and [manage inventory](#) with item-level precision
- wow customers with [automated self-checkout](#)
- [gain insight](#) into sales trends and predict future demands
- [optimize supply chains](#) and respond to disruptions
- [meet sustainability goals](#) by reducing shipments
- [improve loss prevention](#) and [fight counterfeiting](#)

In addition to elevating in-store shopping experiences, RAIN RFID solutions integrate with existing enterprise software to provide data-driven insights, including real-time alerts to changing conditions. This level of visibility is a whole new way to do business, which is why retailers know RFID is no

longer a nice-to-have technology or even a must-have technology – it's a needed-it-yesterday technology.

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To think big, retailers must think small

Very small. [Next-generation RAIN RFID tag chips](#) from Impinj are smaller than a grain of sand. These tiny chips are attached to small antennas to make [RAIN RFID tags](#), which can be incorporated into labels, embedded in hangtags, or even sewn into textiles. Each battery-free tag carries a unique identifier that can be read by RAIN RFID readers in a factory, distribution center, store backroom, point of sale – anywhere along a product's journey.

This can all be done blisteringly fast, giving retailers real-time visibility into where and how their products are moving. RAIN RFID solutions can read hundreds of tags within one second, without direct line-of-sight, preventing unnecessary slowdowns. Inventory counts, for example, can happen at least 25-times faster with RAIN RFID than with barcodes.

This "tech wizardry" as RSR puts it, is becoming the new normal. A full 77% of top retailers, according to RSR, strongly agreed that the inventory visibility and operational improvements that RFID enables can trigger huge savings. Yet digital transformation is about more than short-term ROI – it's about building a foundation for the future of a business.

"This is unprecedented; retailers know the technology works," states RSR, which surveyed a kaleidoscope of retailers for its report. They said that short-term ROI shouldn't block RFID upgrades – that they recognize "digital transformation is a critical strategic initiative. Retailers don't have the choice to opt out here. They have to act, and the good news is, they know it."

RAIN RFID provides resiliency and agility

No retailer wants to relive the existential upheaval of the COVID-19 pandemic, but the truth is, disruptions are inevitable. Supply chain challenges will strike again. Labor shortages aren't going anywhere. Shoppers will expect more and more as technology advances.

Savvy retailers know that, for the most part, the pandemic merely accelerated ongoing trends. That's why digital transformation is crucial for retailers not just to survive the next downturn, but to survive at all.

[RAIN RFID helped retailers weather](#) the COVID-19 pandemic. Now, those that have already adopted it are pulling ahead of the competition. With real-time visibility into their operations, they have the flexibility and agility to respond to changing customer demands and economic forces. They have the insights they need to streamline operations and keep things as efficient as possible. And they're better prepared for the unknown.

The COVID-19 pandemic taught a great many lessons to any retailer willing to learn," the RSR report states. "The paramount need to know what inventory you have – and where – is just the beginning. How quickly a brand can change its course of action to get that inventory where it is needed most – in real time – is a lesson in the importance of flexibility that cannot be forgotten without great peril.

It is only a matter of time until circumstance necessitates such agility again. Smart retailers are doing all they can to prepare for such a day.

[Download your complimentary copy](#) of the Retail Systems Research 2023 benchmark report to learn more about how retailers are turning to RFID as the foundation of their digital transformation. To discover [how RAIN RFID](#) and the [Impinj platform](#) benefit retailers, check out the [Impinj blog](#), [customer stories](#), and [further resources on Impinj.com](#).

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